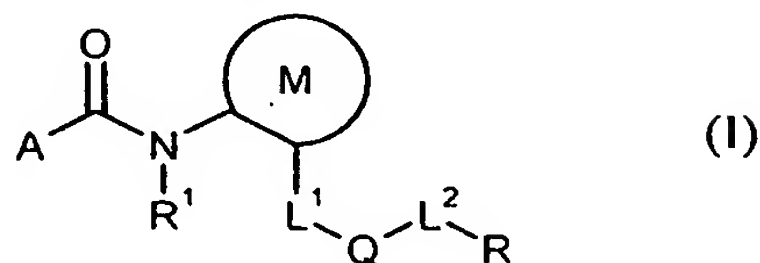


Patent Claims

1. Carboxamides of the formula (I)



5 in which

10 R^1 stands for hydrogen, C_1 - C_8 alkyl, C_1 - C_6 alkylsulfinyl, C_1 - C_6 alkylsulfonyl, C_1 - C_4 -alkoxy- C_1 - C_4 -alkyl, C_3 - C_8 cycloalkyl; C_1 - C_6 haloalkyl, C_1 - C_4 haloalkylthio, C_1 - C_4 haloalkylsulfinyl, C_1 - C_4 haloalkylsulfonyl, halo- C_1 - C_4 -alkoxy- C_1 - C_4 -alkyl, C_3 - C_8 halocycloalkyl with 1 to 9 fluorine, chlorine and/or bromine atoms in each case; formyl, formyl- C_1 - C_3 -alkyl, (C_1 - C_3 -alkyl)carbonyl- C_1 - C_3 -alkyl, (C_1 - C_3 -alkoxy)carbonyl- C_1 - C_3 -alkyl; halo-(C_1 - C_3 -alkyl)carbonyl- C_1 - C_3 -alkyl, halo-(C_1 - C_3 -alkoxy)carbonyl- C_1 - C_3 -alkyl with 1 to 13 fluorine, chlorine and/or bromine atoms in each case;

15 (C_1 - C_8 -alkyl)carbonyl, (C_1 - C_8 -alkoxy)carbonyl, (C_1 - C_4 -alkoxy- C_1 - C_4 -alkyl)carbonyl, (C_3 - C_8 -cycloalkyl)carbonyl; (C_1 - C_6 -haloalkyl)carbonyl, (C_1 - C_6 -haloalkoxy)carbonyl, (halo- C_1 - C_4 -alkoxy- C_1 - C_4 -alkyl)carbonyl, (C_3 - C_8 -halocycloalkyl)carbonyl with 1 to 9 fluorine, chlorine and/or bromine atoms in each case; or $-C(=O)C(=O)R^2$, $-CONR^3R^4$ or $-CH_2NR^5R^6$,

20 R^2 stands for hydrogen, C_1 - C_8 alkyl, C_1 - C_8 alkoxy, C_1 - C_4 -alkoxy- C_1 - C_4 -alkyl, C_3 - C_8 cycloalkyl; C_1 - C_6 haloalkyl, C_1 - C_6 haloalkoxy, halo- C_1 - C_4 -alkoxy- C_1 - C_4 -alkyl, C_3 - C_8 halocycloalkyl with 1 to 9 fluorine, chlorine and/or bromine atoms in each case,

25 R^3 and R^4 stand independently of one another in each case for hydrogen, C_1 - C_8 alkyl, C_1 - C_4 -alkoxy- C_1 - C_4 -alkyl, C_3 - C_8 cycloalkyl; C_1 - C_8 haloalkyl, halo- C_1 - C_4 -alkoxy- C_1 - C_4 -alkyl, C_3 - C_8 halocycloalkyl with 1 to 9 fluorine, chlorine and/or bromine atoms in each case,

30 R^3 and R^4 , moreover, form a substituted, saturated heterocycle with 5 to 8 ring atoms together with the nitrogen atom to which they are bound, with single or multiple, the same or various substitution by halogen or C_1 - C_4 alkyl, whereby the heterocycle can contain 1 or 2 additional, non-adjacent hetero atoms constituted by oxygen, sulfur or NR^7 ,

R^5 and R^6 stand independently of one another for hydrogen, C_1 - C_8 -alkyl, C_3 - C_8 cycloalkyl; C_1 - C_8 haloalkyl, C_3 - C_8 halocycloalkyl with 1 to 9 fluorine, chlorine and/or bromine atoms in each case,

R^5 and R^6 , moreover, form a substituted, saturated heterocycle with 5 to 8 ring atoms together with the nitrogen atom to which they are bound, with single or multiple, the same or various substitution by halogen or C_1 - C_4 alkyl, whereby the heterocycle can contain 1 or 2 additional, non-adjacent hetero atoms constituted by oxygen, sulfur or NR^7 ,

R^7 stands for hydrogen or C_1 - C_6 alkyl,

M stands in each case for a phenyl, pyridine or pyrimidine, pyridazine or pyrazine ring with a single substitution by R^8 or for a thiazole ring substituted by R^{8-A} ,

R^8 stands for hydrogen, fluorine, chlorine, methyl, isopropyl, methylthio or trifluoromethyl,

R^8 also stands for methoxy,

R^{8-A} stands for hydrogen, methyl, methylthio or trifluoromethyl,

L^1 stands for C_1 - C_{10} alkylene (alkanediyl),

Q stands for O, S, SO, SO_2 or NR^9 ,

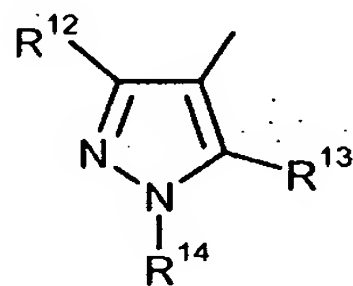
L^2 stands for a direct link, $SiR^{10}R^{11}$ or CO,

R stands for hydrogen, C_1 - C_8 alkyl, C_1 - C_8 alkoxy, C_1 - C_4 -alkoxy- C_1 - C_4 -alkyl, C_1 - C_4 -alkylthio- C_1 - C_4 -alkyl, C_2 - C_8 alkenyl, C_2 - C_8 alkynyl, C_1 - C_6 haloalkyl, C_2 - C_6 haloalkenyl, C_2 - C_6 haloalkynyl or C_3 - C_6 cycloalkyl,

R^9 stands for hydrogen, C_1 - C_8 alkyl, C_1 - C_4 -alkoxy- C_1 - C_4 -alkyl, C_1 - C_4 -alkylthio- C_1 - C_4 -alkyl, C_2 - C_8 alkenyl, C_2 - C_8 alkynyl, C_1 - C_6 haloalkyl, C_2 - C_6 haloalkenyl, C_2 - C_6 haloalkynyl or C_3 - C_6 cycloalkyl,

R^{10} and R^{11} stand independently of one another for hydrogen, C_1 - C_8 alkyl, C_1 - C_8 alkoxy, C_1 - C_4 -alkoxy- C_1 - C_4 -alkyl, C_1 - C_4 -alkylthio- C_1 - C_4 -alkyl or C_1 - C_6 haloalkyl,

A stands for the group of the formula (A1)



(A1), in which

R^{12} stands for hydrogen, cyano, halogen, nitro, C_1 - C_4 alkyl, C_1 - C_4 alkoxy, C_1 - C_4 alkylthio, C_3 - C_6 cycloalkyl, C_1 - C_4 haloalkyl, C_1 - C_4 haloalkoxy or C_1 - C_4 haloalkylthio, in each case with 1 to 5 halogen atoms, aminocarbonyl or aminocarbonyl- C_1 - C_4 -alkyl,

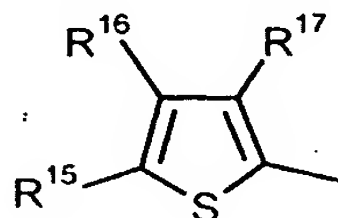
R^{13} stands for hydrogen, halogen, cyano, C_1 - C_4 alkyl, C_1 - C_4 alkoxy or C_1 - C_4 alkylthio,

R^{14} stands for hydrogen, C_1 - C_4 alkyl, hydroxy- C_1 - C_4 alkyl, C_2 - C_6 alkenyl, C_3 - C_6 cycloalkyl, C_1 - C_4 -alkylthio- C_1 - C_4 -alkyl, C_1 - C_4 -alkoxy- C_1 - C_4 -alkyl, C_1 - C_4

haloalkyl, C₁-C₄-haloalkylthio-C₁-C₄-alkyl, C₁-C₄-haloalkoxy-C₁-C₄-alkyl
in each case with 1 to 5 halogen atoms, or phenyl,

or

A stands for the group of the formula (A2)



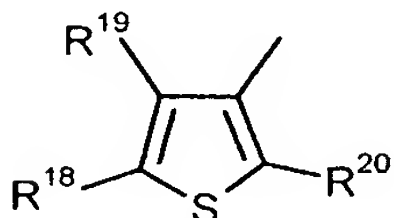
(A2), in which

R¹⁵ and R¹⁶ stand independently of one another for hydrogen, halogen, C₁-C₄ alkyl
or C₁-C₄ haloalkyl with 1 to 5 halogen atoms,

R¹⁷ stands for halogen, cyano or C₁-C₄ alkyl, or C₁-C₄ haloalkyl or C₁-C₄
haloalkoxy with 1 to 5 halogen atoms in each case,

or

A stands for the group of the formula (A3)



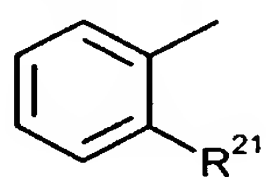
(A3), in which

R¹⁸ and R¹⁹ stand independently of one another for hydrogen, halogen, C₁-C₄ alkyl
or C₁-C₄ haloalkyl with 1 to 5 halogen atoms,

R²⁰ stands for hydrogen, halogen, C₁-C₄ alkyl or C₁-C₄ haloalkyl with 1 to 5
halogen atoms,

or

A stands for the group of the formula (A4)

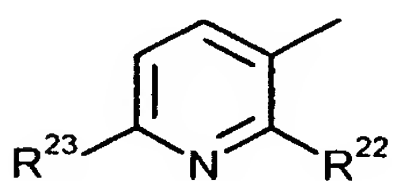


(A4), in which

R²¹ stands or hydrogen, halogen, hydroxy, cyano, C₁-C₆ alkyl, C₁-C₄ haloalkyl,
C₁-C₄ haloalkoxy or C₁-C₄ haloalkylthio in each case with 1 to 5 halogen
atoms,

or

A stands for the group of the formula (A5)



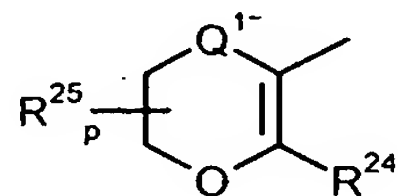
(A5), in which

R²² stands for halogen, hydroxy, cyano, C₁-C₄ alkyl, C₁-C₄ alkoxy, C₁-C₄
alkylthio, C₁-C₄ haloalkyl, C₁-C₄ haloalkylthio or C₁-C₄ haloalkoxy in each
case with 1 to 5 halogen atoms,

R^{23} stands for hydrogen, halogen, cyano, C_1 - C_4 alkyl, C_1 - C_4 alkoxy, C_1 - C_4 alkylthio, C_1 - C_4 haloalkyl, C_1 - C_4 haloalkoxy in each case with 1 to 5 halogen atoms, C_1 - C_4 alkylsulfinyl or C_1 - C_4 alkylsulfonyl,

or

5 A stands for the group of the formula (A6)



(A6), in which

R^{24} stands for C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

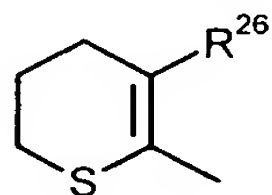
R^{25} stands for C_1 - C_4 alkyl,

Q^1 stands for S (sulfur), SO, SO₂ or CH₂,

10 p stands for 0, 1 or 2, whereby R^{25} stands for identical or various groups if p is 2,

or

A stands for the group of the formula (A7)

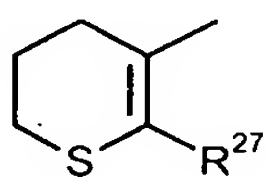


(A7), in which

15 R^{26} stands for C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

or

A stands for the group of the formula (A8)



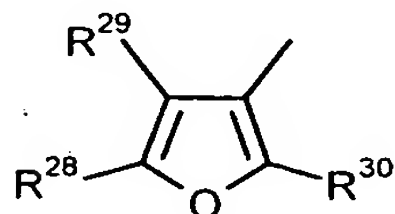
(A8), in which

R^{27} stands for C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

20

or

A stands for the group of the formula (A9)



(A9), in which

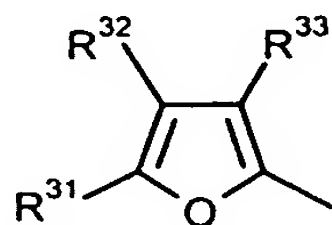
R^{28} and R^{29} stand independently of one another for hydrogen, halogen, amino, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

25

R^{30} stands for hydrogen, halogen, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

or

A stands for the group of the formula (A10)

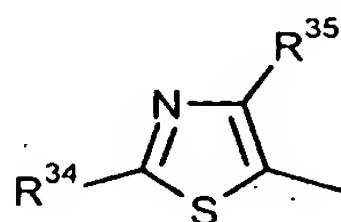


(A10), in which

R^{31} and R^{32} stand independently of one another for hydrogen, halogen, amino, nitro, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,
 R^{33} stands for hydrogen, halogen, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

or

A stands for the group of the formula (A11)

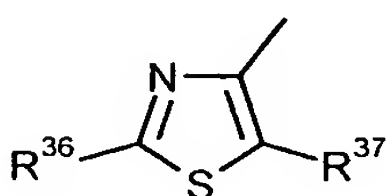


(A11), in which

R^{34} stands for hydrogen, halogen, amino, C_1 - C_4 alkylamino, di-(C_1 - C_4 alkyl)amino, cyano, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,
 R^{35} stands for halogen, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

or

A stands for the group of the formula (A12)

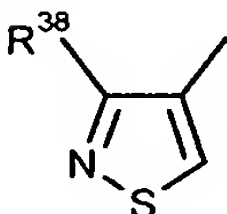


(A12), in which

R^{36} stands for hydrogen, halogen, amino, C_1 - C_4 alkylamino, di-(C_1 - C_4 alkyl)amino, cyano, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,
 R^{37} stands for halogen, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

or

A stands for the group of the formula (A13)

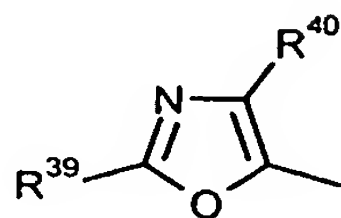


(A13), in which

R^{38} stands for halogen, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

or

A stands for the group of the formula (A14)



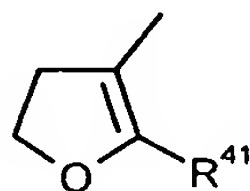
(A14), in which

 R^{39} stands for hydrogen or C_1 - C_4 alkyl, R^{40} stands for halogen or C_1 - C_4 alkyl,

or

5

A stands for the group of the formula (A15)

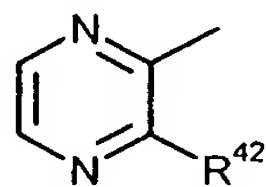


(A15), in which

 R^{41} stands for C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

or

A stands for the group of the formula (A16)

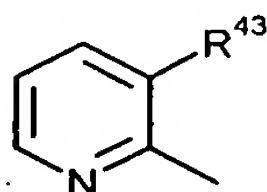


(A16), in which

 R^{42} stands for hydrogen, halogen, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

or

A stands for the group of the formula (A17)



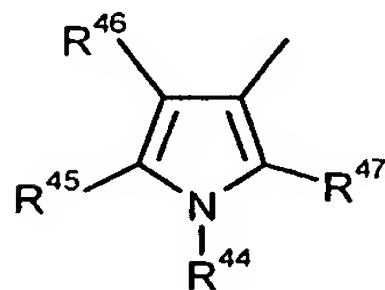
(A17), in which

 R^{43} stands for halogen, hydroxy, C_1 - C_4 alkyl, C_1 - C_4 alkoxy, C_1 - C_4 alkylthio, C_1 - C_4 haloalkyl, C_1 - C_4 haloalkylthio or C_1 - C_4 haloalkoxy with 1 to 5 halogen atoms in each case,

or

20

A stands for the group of the formula (A18)



(A18), in which

 R^{44} stands for hydrogen, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl with 1 to 5 halogen atoms, C_1 - C_4 -alkoxy- C_1 - C_4 alkyl, hydroxy- C_1 - C_4 alkyl, C_1 - C_4 alkylsulfonyl, di(C_1 - C_4 alkyl)aminosulfonyl, C_1 - C_6 alkylcarbonyl or in each case possibly substituted phenylsulfonyl or benzoyl,

25

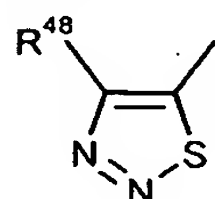
R^{45} stands for hydrogen, halogen, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

R^{46} stands for hydrogen, halogen, cyano, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

5 R^{47} stands for hydrogen, halogen, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

or

A stands for the group of the formula (A19)



(A19), in which

10 R^{48} stands for C_1 - C_4 alkyl.

2. Carboxamides of the formula (I) according to Claim 1, in which R does not stand for alkoxy, if L^2 stands for a direct link.

15 3. Carboxamides of the formula (I) according to Claim 1 or 2, in which

R^1 stands for hydrogen, C_1 - C_6 alkyl, C_1 - C_4 alkylsulfinyl, C_1 - C_4 alkylsulfonyl, C_1 - C_3 -alkoxy- C_1 - C_3 -alkyl, C_3 - C_6 cycloalkyl; C_1 - C_4 haloalkyl, C_1 - C_4 haloalkylthio, C_1 - C_4 haloalkylsulfinyl, C_1 - C_4 haloalkylsulfonyl, halo- C_1 - C_3 -alkoxy- C_1 - C_3 -alkyl, C_3 - C_8 halocycloalkyl with 1 to 9 fluorine, chlorine and/or bromine atoms in each case; formyl, formyl- C_1 - C_3 -alkyl, (C_1 - C_3 -alkyl)carbonyl- C_1 - C_3 -alkyl, (C_1 - C_3 -alkoxy)carbonyl- C_1 - C_3 -alkyl; halo-(C_1 - C_3 -alkyl)carbonyl- C_1 - C_3 -alkyl, halo-(C_1 - C_3 -alkoxy)carbonyl- C_1 - C_3 -alkyl with 1 to 13 fluorine, chlorine and/or bromine atoms in each case;

25 (C_1 - C_6 alkyl)carbonyl, (C_1 - C_4 alkoxy)carbonyl, (C_1 - C_3 -alkoxy- C_1 - C_3 -alkyl)carbonyl, (C_3 - C_6 cycloalkyl)carbonyl; (C_1 - C_4 haloalkyl)carbonyl, (C_1 - C_4 haloalkoxy)carbonyl, (halo- C_1 - C_3 -alkoxy- C_1 - C_3 -alkyl)carbonyl, (C_3 - C_6 halocycloalkyl)carbonyl with 1 to 9 fluorine, chlorine and/or bromine atoms in each case; or $-C(=O)C(=O)R^2$, $-CONR^3R^4$ or $-CH_2NR^5R^6$,

30 R^2 stands for hydrogen, C_1 - C_6 alkyl, C_1 - C_4 alkoxy, C_1 - C_3 -alkoxy- C_1 - C_3 -alkyl, C_3 - C_6 cycloalkyl; C_1 - C_4 haloalkyl, C_1 - C_4 haloalkoxy, halo- C_1 - C_3 -alkoxy- C_1 - C_3 -alkyl, C_3 - C_6 halocycloalkyl with 1 to 9 fluorine, chlorine and/or bromine atoms in each case,

35 R^3 and R^4 stand independently of one another in each case for hydrogen, C_1 - C_6 alkyl, C_1 - C_3 -alkoxy- C_1 - C_3 -alkyl, C_3 - C_6 cycloalkyl; C_1 - C_4 haloalkyl, halo- C_1 - C_3 -alkoxy- C_1 - C_3 -alkyl, C_3 - C_6 halocycloalkyl with 1 to 9 fluorine, chlorine and/or bromine atoms in each case,

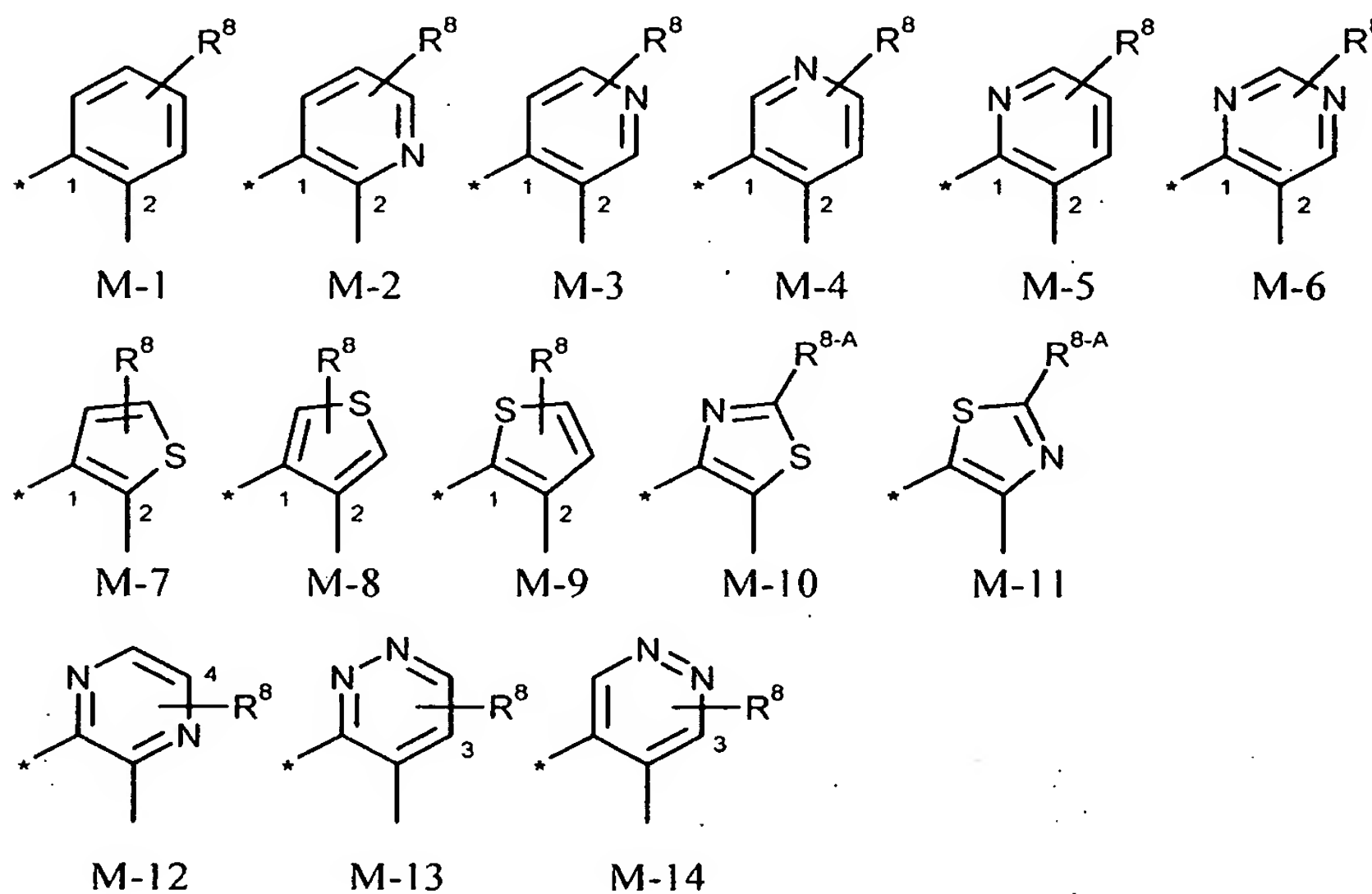
R^3 and R^4 , moreover, form a substituted, saturated heterocycle with 5 to 8 ring atoms together with the nitrogen atom to which they are bound, with single or multiple, the same or various substitution by halogen or C_1 - C_4 alkyl, whereby the heterocycle can contain 1 or 2 additional, non-adjacent hetero atoms constituted by oxygen, sulfur or NR^7 ,

R^5 and R^6 stand independently of one another for hydrogen, C_1 - C_6 -alkyl, C_3 - C_6 cycloalkyl; C_1 - C_4 haloalkyl, C_3 - C_6 halocycloalkyl with 1 to 9 fluorine, chlorine and/or bromine atoms in each case,

R^5 and R^6 , moreover, form a substituted, saturated heterocycle with 5 to 8 ring atoms together with the nitrogen atom to which they are bound, with single or multiple, the same or various substitution by halogen or C_1 - C_4 alkyl, whereby the heterocycle can contain 1 or 2 additional, non-adjacent hetero atoms constituted by oxygen, sulfur or NR^7 ,

R^7 stands for hydrogen or C_1 - C_4 alkyl,

M stands for one of the following cyclics



whereby the bond marked with an asterisk is linked to the amide,

R^8 stands for hydrogen, fluorine, chlorine, methyl, isopropyl, methylthio or trifluoromethyl,

R^8 also stands for methoxy,

R^{8-A} stands for hydrogen, methyl, methylthio or trifluoromethyl,

L^1 stands for C_1 - C_{10} alkylene (alkanediyl),

Q stands for O, S, SO, SO_2 or NR^9 ,

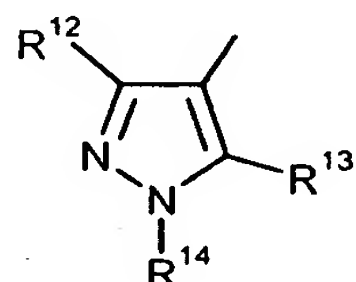
L^2 stands for a direct link, $SiR^{10}R^{11}$ or CO,

R stands for hydrogen, C₁-C₆ alkyl, C₁-C₆ alkoxy, C₁-C₃-alkoxy-C₁-C₃-alkyl, C₁-C₃-alkylthio-C₁-C₃-alkyl or C₁-C₄ haloalkyl or C₃-C₆ cycloalkyl,

R⁹ stands for hydrogen, C₁-C₆ alkyl, C₁-C₃-alkoxy-C₁-C₃-alkyl, C₁-C₃-alkylthio-C₁-C₃-alkyl or C₃-C₆ cycloalkyl,

5 R¹⁰ and R¹¹ stand independently of one another preferably for C₁-C₆ alkyl, C₁-C₆ alkoxy, C₁-C₃-alkoxy-C₁-C₃-alkyl or C₁-C₃-alkylthio-C₁-C₃-alkyl,

A stands for the group of the formula (A1)



(A1), in which

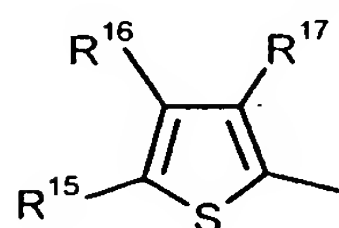
10 R¹² stands for hydrogen, cyano, fluorine, chlorine, bromine, iodine, methyl, ethyl, isopropyl, methoxy, ethoxy, methylthio, ethylthio, cyclopropyl, C₁-C₂ haloalkyl, C₁-C₂ haloalkoxy in each case with 1 to 5 fluorine, chlorine and/or bromine atoms, trifluoromethylthio, difluoromethylthio, aminocarbonyl, aminocarbonylmethyl or aminocarbonylethyl,

15 R¹³ stands for hydrogen, fluorine, chlorine, bromine, iodine, methyl, ethyl, methoxy, ethoxy, methylthio or ethylthio,

R¹⁴ stands for hydrogen, methyl, ethyl, n-propyl, isopropyl, C₁-C₂ haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms, hydroxymethyl, hydroxyethyl, cyclopropyl, cyclopentyl, cyclohexyl or phenyl,

or

20 A stands for the group of the formula (A2)



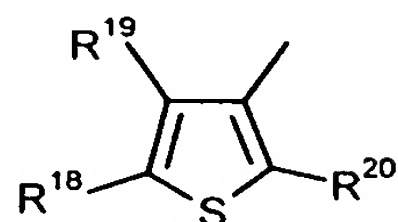
(A2), in which

R¹⁵ and R¹⁶ stand independently of one another for hydrogen, fluorine, chlorine, bromine, methyl, ethyl or C₁-C₂ haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

25 R¹⁷ stands for fluorine, chlorine, bromine, cyano, methyl, ethyl, C₁-C₂ haloalkyl or C₁-C₂ haloalkoxy in each case with 1 to 5 fluorine, chlorine and/or bromine atoms,

or

A stands for the group of the formula (A3)



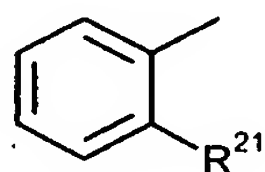
(A3), in which

R^{18} and R^{19} stand independently of one another for hydrogen, fluorine, chlorine, bromine, methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

5 R^{20} stands for hydrogen, fluorine, chlorine, bromine, methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

or

A stands for the group of the formula (A4)

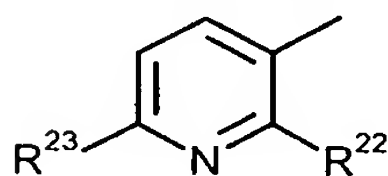


(A4), in which

10 R^{21} stands for hydrogen, fluorine, chlorine, bromine, iodine, hydroxy, cyano, C_1 - C_4 alkyl, C_1 - C_2 haloalkyl, C_1 - C_2 haloalkoxy or C_1 - C_2 haloalkylthio in each case with 1 to 5 fluorine, chlorine and/or bromine atoms,

or

A stands for the group of the formula (A5)



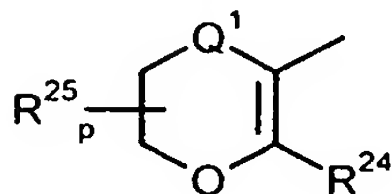
(A5), in which

15 R^{22} stands for fluorine, chlorine, bromine, iodine, hydroxy, C_1 - C_4 alkyl, methoxy, ethoxy, methylthio, ethylthio, difluoromethylthio, trifluoromethylthio, C_1 - C_2 haloalkyl or C_1 - C_2 haloalkoxy in each case with 1 to 5 fluorine, chlorine and/or bromine atoms,

20 R^{23} stands for hydrogen, fluorine, chlorine, bromine, iodine, cyano, C_1 - C_4 alkyl, methoxy, ethoxy, methylthio, ethylthio, C_1 - C_2 haloalkyl or C_1 - C_2 haloalkoxy in each case with 1 to 5 fluorine, chlorine and/or bromine atoms, C_1 - C_2 alkylsulfinyl or C_1 - C_2 alkylsulfonyl,

or

25 A stands for the group of the formula (A6)



(A6), in which

R^{24} stands for methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

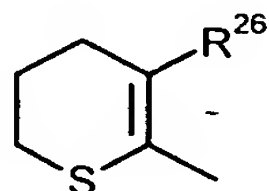
R^{25} stands for methyl or ethyl,

Q^1 stands for S (sulfur), SO_2 or CH_2 ;

p stands for 0 or 1,

or

A stands for the group of the formula (A7)

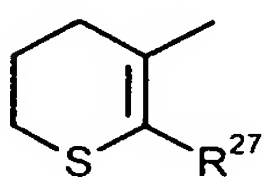


(A7), in which

R^{26} stands for methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

or

A stands for the group of the formula (A8)

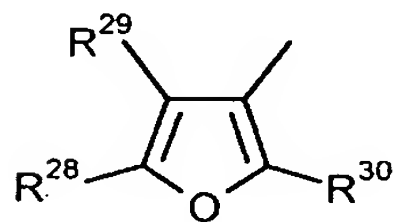


(A8), in which

R^{27} stands for methyl, ethyl, trifluoromethyl, difluoromethyl, difluorochloromethyl or trichloromethyl,

or

A stands for the group of the formula (A9)



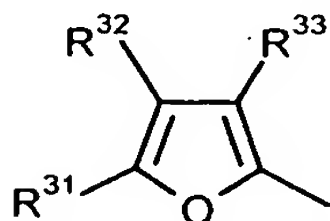
(A9), in which

R^{28} and R^{29} stand independently of one another for hydrogen, fluorine, chlorine, bromine, amino, methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

R^{30} stands for hydrogen, fluorine, chlorine, bromine, iodine, methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

or

A stands for the group of the formula (A10)



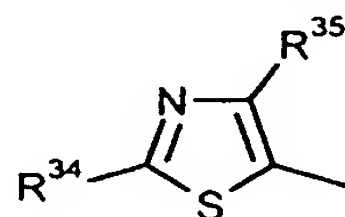
(A10), in which

R^{31} and R^{32} stand independently of one another for hydrogen, fluorine, chlorine, bromine, amino, nitro, methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

R^{33} stands for hydrogen, fluorine, chlorine, bromine, methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

or

A stands for the group of the formula (A11)



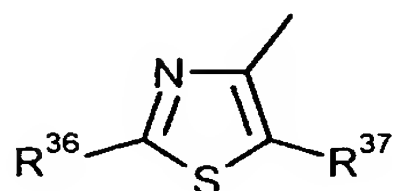
(A11), in which

R^{34} stands for hydrogen, fluorine, chlorine, bromine, amino, C_1 - C_4 alkylamino, di(C_1 - C_4 alkyl)amino, cyano, methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

R^{35} stands for fluorine, chlorine, bromine, methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

or

A stands for the group of the formula (A12)



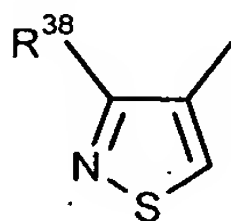
(A12), in which

R^{36} stands for hydrogen, fluorine, chlorine, bromine, amino, C_1 - C_4 alkylamino, di(C_1 - C_4 alkyl)amino, cyano, methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

R^{37} stands for fluorine, chlorine, bromine, methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

or

A stands for the group of the formula (A13)

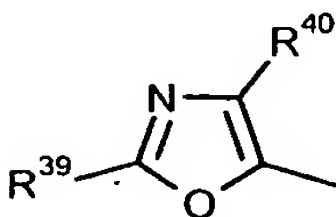


(A13), in which

R^{38} stands for fluorine, chlorine, bromine, methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

or

A stands for the group of the formula (A14)



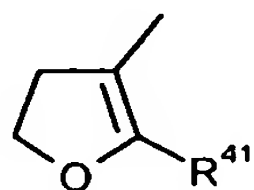
(A14), in which

R^{39} stands for hydrogen, methyl or ethyl,

R^{40} stands for fluorine, chlorine, bromine, methyl or ethyl,

or

A stands for the group of the formula (A15)



(A15), in which

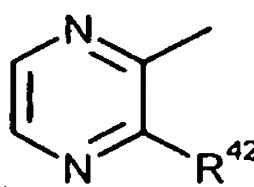
R^{41} stands for methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

or

5

A

stands for the group of the formula (A16)



(A16), in which

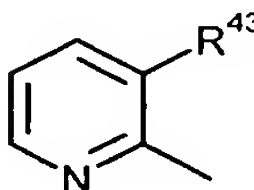
R^{42} stands for hydrogen, fluorine, chlorine, bromine, methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

or

10

A

stands for the group of the formula (A17)



(A17), in which

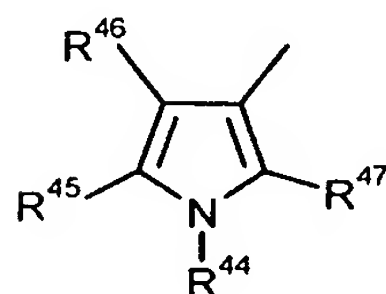
R^{43} stands for fluorine, chlorine, bromine, iodine, hydroxy, C_1 - C_4 alkyl, methoxy, ethoxy, methylthio, ethylthio, difluoromethylthio, trifluoromethylthio, C_1 - C_2 haloalkyl or C_1 - C_2 haloalkoxy in each case with 1 to 5 fluorine, chlorine and/or bromine atoms,

15

or

A

stands for the group of the formula (A18)



(A18), in which

R^{44} stands for hydrogen, methyl, ethyl, C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms, C_1 - C_4 -alkoxy- C_1 - C_4 -alkyl, hydroxymethyl, hydroxyethyl, methylsulfonyl or dimethylaminosulfonyl,

20

R^{45} stands for hydrogen, fluorine, chlorine, bromine, methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

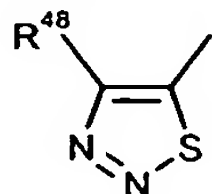
R^{46} stands for hydrogen, fluorine, chlorine, bromine, iodine, cyano, methyl, ethyl, isopropyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

25

R^{47} stands for hydrogen, fluorine, chlorine, bromine, methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

or

A stands for the group of the formula (A19)



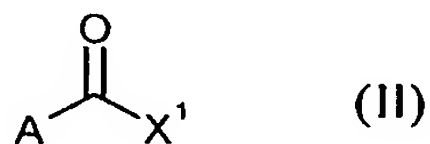
(A19), in which

 R^{48} stands for methyl, ethyl, n-propyl or isopropyl.

5

4. A process for synthesizing the carboxamides of the formula (I) according to Claim 1, characterized in that

(a) carboxylic acid derivatives the formula (II)



(II)

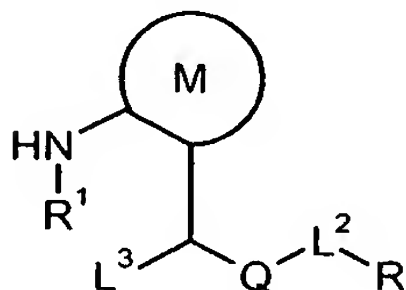
10

in which

A has the meanings specified above and

 X^1 stands for halogen or hydroxy,

are reacted with aniline derivatives of the formula (III)



(III)

15

in which

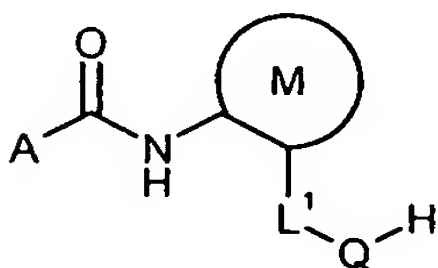
 R^1 , M, Q, L^2 and R have the meanings specified above, L^3 stands for hydrogen or C_1 - C_9 alkyl,

possibly in the presence of a catalyst, possibly in the presence a condensation agent, possibly in the presence of an acid binder and possibly in the presence of a diluent,

20

or

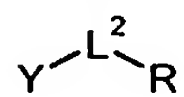
(b) carboxamides of the formula (IV)



(IV)

in which M, L^1 , Q and A have the meanings specified above,

are reacted with a compound of the formula (V),



(V)

in which

25

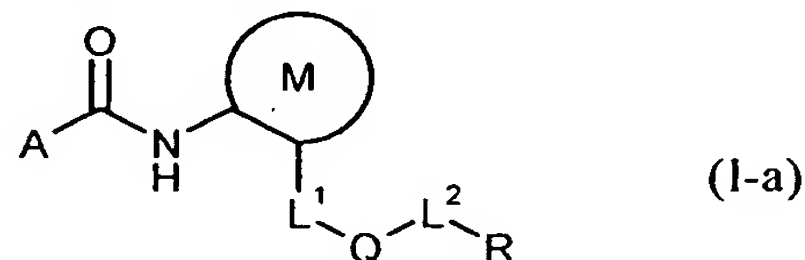
L^2 and R have the meanings specified above and

Y stands for halogen, triflate (trifluoromethylsulfonyl), mesylate (methylsulfonyl) or tosylate (4-methylphenylsulfonyl),

in the presence of a base and in the presence of a dilution medium,

5 or

(c) carboxamides of the formula (I-a)



in which M, L^1 , Q, L^2 , R and A have the meanings specified above,

are reacted with halides of the formula (VI)



10

in which

X^2 stands for chlorine, bromine or iodine,

R^{1-A} stands for C_1 - C_8 alkyl, C_1 - C_6 alkylsulfinyl, C_1 - C_6 alkylsulfonyl, C_1 - C_4 -alkoxy- C_1 - C_4 -alkyl, C_3 - C_8 cycloalkyl; C_1 - C_6 haloalkyl, C_1 - C_4 haloalkylthio, C_1 - C_4 haloalkylsulfinyl, C_1 - C_4 haloalkylsulfonyl, halo- C_1 - C_4 -alkoxy- C_1 - C_4 -alkyl, C_3 - C_8 halocycloalkyl with 1 to 9 fluorine, chlorine and/or bromine atoms in each case; formyl, formyl- C_1 - C_3 -alkyl, (C_1 - C_3 -alkyl)carbonyl- C_1 - C_3 -alkyl, (C_1 - C_3 -alkoxy)carbonyl- C_1 - C_3 -alkyl; halo-(C_1 - C_3 alkyl)carbonyl- C_1 - C_3 -alkyl, halo-(C_1 - C_3 alkoxy)carbonyl- C_1 - C_3 -alkyl with 1 to 13 fluorine, chlorine and/or bromine atoms in each case; (C_1 - C_8 alkyl)carbonyl, (C_1 - C_8 alkoxy)carbonyl, (C_1 - C_4 -alkoxy- C_1 - C_4 -alkyl)carbonyl, (C_3 - C_8 cycloalkyl)carbonyl; (C_1 - C_6 haloalkyl)carbonyl, (C_1 - C_6 haloalkoxy)carbonyl, (halo- C_1 - C_4 -alkoxy- C_1 - C_4 -alkyl)carbonyl, (C_3 - C_8 halocycloalkyl)carbonyl with 1 to 9 fluorine, chlorine and/or bromine atoms in each case; or $-C(=O)C(=O)R^2$, $-CONR^3R^4$ or $-CH_2NR^5R^6$,

15

20

25

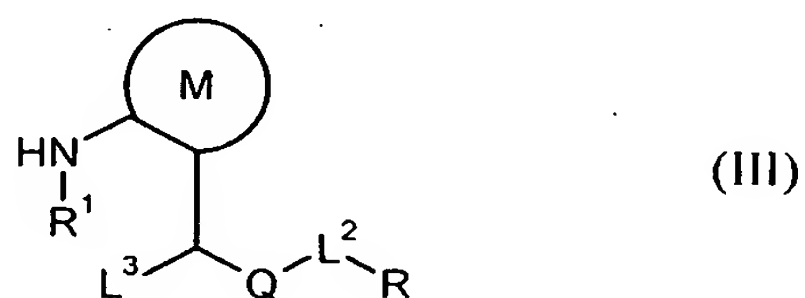
whereby R^2 , R^3 , R^4 , R^5 and R^6 have the meanings specified above,

in the presence of a base and in the presence of a dilution medium.

5. Media for combating undesirable microorganisms, characterized by containing at least one carboxamide of the formula (I) according to Claim 1 together with extenders and/or surface-active materials.

30

6. The use of carboxamides of the formula (I) according to Claim 1 to combat undesired microorganisms.
7. Processes for combating undesired microorganisms, characterized in that carboxamides of the formula (I) are applied microorganisms and/or their environment in accordance with Claim 1.
8. Processes for synthesizing materials to combat undesired microorganisms, characterized in that carboxamides of the formula (I) are mixed with extenders and/or surface-active materials according to Claim 1.
9. Aniline derivatives of the formula (III)

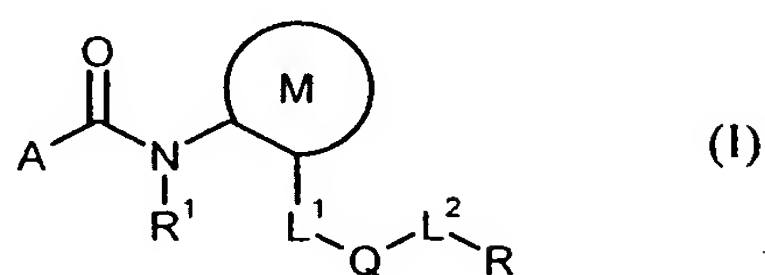


in which

- 15 R¹, M, Q, L² and R have the meanings specified in Claim 1 and L³ stands for hydrogen or C₁-C₉ alkyl.

Carboxamides**S u m m a r y**

New carboxamides of the formula (I)



in which

R¹, M, L¹, Q, L², R and A have the meanings specified in the description,

several processes for synthesizing these materials and their use in combating undesirable microorganisms, as well as new intermediate products and their synthesis.